

Remarks

Claims 1, 6-7, 10, 28, and 37 are amended. Please cancel claims 4-6, 13-15, 31-33, 40-42, 46-51, and 54, without prejudice to further prosecution. Applicant reserves the right to pursue these claims in a later-filed continuation or divisional case.

Claims 1, 4-10, 13-18, 28, 31-37, and 40-46 stand rejected under 35 U.S.C. 112, second paragraph, as allegedly being indefinite. The term "having at least one action of GLP-1" has been deleted from the independent claims, and this rejection is now rendered moot.

Claims 1-2, 4-11, 13-18, 28-29, 31-38, and 40-51 stand rejected under 35 U.S.C. 112, first paragraph, as allegedly failing to comply with the enablement requirement. The claims have been amended to recite GLP-1 and analogs or derivatives having at least 90% amino acid sequence homology to GLP-1. Thus the term "within five orders of magnitude..." is no longer relevant to this claim. With respect to analogs and derivatives, persons of ordinary skill in the art understand that a molecule can be manipulated to slightly change its character while retaining its activity. And persons of ordinary skill in the art would readily accept that up to 10% of an amino acid sequence can be amended while retaining such activity. This rejection is now believed to be moot.

Claims 1-2, 7, 10-11, 16, 28-29, 34, 37-38, 43, and 46-56 stand rejected under 35 U.S.C. 102(b) as allegedly being anticipated by Momose et al. (USP 6,251,926). Momose discloses a oxyiminoalkanoic acid derivative having a hypoglycemic effect and hypolipidemic effect. The rejection refers to Col. 23, line 40, where GLP-1 is listed in a very long "laundry list" of compounds for treating diabetes mellitus, purportedly usable in combination with the oxyiminoalkanoic acid derivatives.

Momose does not anticipate the present claims for various reasons. First, the disclosure of Momose is, at best, a mere invitation to experiment with the thousands of disclosed oxyiminoalkanoic acids used in combination with dozens of agents listed to see if desirable effects may be achievable with some combination of compounds in the treatment of the dozens of diseases and disorders listed by Momose (Cols. 22-23). Momose provides no reasonable expectation of success, and the various combinations of compounds and diseases represent an enormous number of possible combinations. Momose provides no guidance on which

combinations of compounds are useful for treating which types of disorders. Thus, Momose clearly does not enable the treatment of nephropathy, end stage renal disease, or the prevention or slowing of glomerulosclerosis with GLP-1, nor provide the person of ordinary skill with a reasonable expectation of success in any particular combination. Momose represents a mere wish or hope that some compounds could be combined with the oxyminoalkanoic acids to achieve desirable effects in some type of disease or disorder. Anticipation requires that the assertedly anticipating disclosure enable the subject matter of the reference, without requiring undue experimentation. *Elan Pharmaceuticals, Inc. v. Mayo Fdn for Med. Ed. and Res.*, 346 F.3d 1051; 68 USPQ2d 1373 (Fed. Cir. 2003).

Claims 4-6, 8-9, 13-15, 17-18, 31-33, 35-36, 40-42, and 44-45 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Momose (USP 6,251,926). For the same reasons cited above with respect to anticipation, Momose does not render the present claims obvious either.

Claims 1-2, 4-5, 7, 10-11, 13-14, 16, 28-29, 31-32, 34, 37-38, 40-41, 43, and 46-56 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Knudsen (US 2003/0144206, 12/23/2002). Claims 6, 8-9, 15, 17-18, 33, 35-36, 42, and 44-45 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Knudsen.

Knudsen is not prior art to the presently claimed invention. Knudsen was filed on Dec, 23, 2002, but the present invention claims priority to the provisional application Serial No. 60/434,888, filed Dec. 19, 2002. Full basis is found for each of the presently pending claims in the provisional specification. The following table identifies the basis for each claim with reference to the provisional specification:

1. p. 3, line 25; p. 5, lines 1-10
2. p. 3, line 31
7. p. 9, line 30
8. p. 12, line 10; p. 11, line 22
9. p. 12, line 11; p. 11, line 22
10. p. 13, line 24; p. 2, lines 25-27

- 11. p. 3, line 31
- 16. p. 9, line 30
- 17. 12, line 10; p. 11, line 22
- 18. p. 12, line 11; . 11, line 22
- 28. p. 3, line 25; p. 5, line 1-10; p. 2, lines 26-27
- 29. p. 3, line 31
- 34. p. 9, line 30
- 35. p. 12, line 10; p. 11, line 22
- 36. p. 12, line 11; p. 11, line 22
- 37. p. 3, line 25; p. 5, lines 1-10; p. 2, line 27
- 38. p. 3, line 31
- 43. p. 9, line 30
- 44. p. 12, line 10; p. 11, line 22
- 45. p. 12, line 11; p. 11, line 22
- 52. p. 3, line 31; p. 4, lines 3-8
- 53. p. 3, line 31; p. 4, lines 3-8
- 54. p. 3, line 31; p. 4, lines 3-8
- 55. p. 3, line 31; p. 4, lines 3-8
- 56. p. 3, line 31; p. 4, lines 3-8

Claims 1-2, 4-11, 13-18, 28-29, 31-38, and 40-56 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Coolidge (WO 01/89554) in view of Hlst et al. (WO 02/085406) and further in view of Guitard et al. (US 2001/0016586).

In order for a claim to be obvious it is necessary that there be some articulated reasoning with some rational underpinning to support such a legal conclusion. Rejections on obviousness grounds are not proper when supported by mere conclusory statements. *In re Kahn*, 441 F.3d

977, 988 (Fed. Cir. 2006) (*quoted approvingly* in *KSR Int'l. Co. v. Teleflex Inc.*, 550 US. ____ (2007)).

The rejection alleges that Coolidge teaches a method of treatment using GLP-1, of an individual with cardiac abnormalities consistent with ischemic heart disease, and that the claims are “inviting the artisan to do the same kind of experimentation that the reference would require.”). Office Action mailed 2/6/08, pp. 10-11. But this approach is legally incorrect. The present claims simply define the invention, which is their appropriate legal purpose. The correct inquiry is whether Coolidge in view of Holst and Guitard would lead the person of ordinary skill in the art to the treatment of a nephropathy or end stage renal disease by administration of GLP-1, or whether the references would lead the person of ordinary skill to believe that GLP-1 can be administered to reduce proteinuria, or prevent or slow the progression of glomerulosclerosis. The rejection provides no rational basis to support such a legal conclusion. The rejection is based merely on conclusory logic that the same mechanisms involved in ameliorating ischemic heart disease will be the very same involved in treating nephropathy and end stage renal disease, and that they can be treated in an equivalent manner.

Coolidge discloses that excess glucagon can lead to myocardial tissue damage, but does not speculate on how or why GLP-1 treats ischemic heart disease. Holst discloses treating insulin resistance with GLP-1, and Guitard discloses that hypoglycemic agents can be used to prevent or delay the progression to overt diabetes. Guitard discloses a large number of hypoglycemic agents, principally neteglinide and repaglinide, useful for treating conditions associated with impaired glucose tolerance and impaired fasting glucose. Guitard also provides a long “laundry list” of dozens of other hypoglycemic agents, which GLP-1 is disclosed as a member of the list (paragraphs 11-29). Guitard also provides another long list of dozens of disorders that are treatable with the hypoglycemic agents (paragraphs 41-47). But this (inappropriate) combination of references provides no motivation to the person of ordinary skill in the art to treat nephropathy by administering GLP-1, nor is there even present a real motivation to combine the references. With respect to nephropathy these references provide no guiding information as to likely success of treating this disorder with GLP-1. Thus, after reviewing these references the person of ordinary skill finds no motivation to treat nephropathy with GLP-1, as presently claimed.

It appears that the rejection is based entirely on inappropriate hindsight reasoning, where unjustified presumptions have been made and used to “cherry pick” particular disclosures out of context of the references, which referenced disclosures are only partially related, to formulate the rejection. This is legally erroneous and no prima facie case of obviousness has been properly made.

For all of these reasons the claims are not obvious over the cited combination of references.

Closing

In view of the above reconsideration and withdrawal of all rejections is respectfully requested, and that the claims be passed to allowance.

No fee is believed due in association with this response. But if Applicants are in error, the Commissioner is hereby authorized to charge any underpayment or credit any overpayment during the pendency of this application or any patent issuing from this application to Deposit Account No. 010535.

Respectfully submitted,

Dated: May 6, 2008

By: Richard San Pietro
Richard San Pietro
Registration No. 45,071

AMYLIN PHARMACEUTICALS, INC.
9360 Towne Centre Drive
San Diego, CA 92121
Telephone: 858.754.4981
Facsimile: 858.552.1936